

In the claims

The following amendments are made with respect to the claims in the International application PCT/GB2003/004894.

This listing of claims will replace all prior versions and listings of claims in this application.

Claims

1 (Currently amended). A ~~[[process]]~~ method for forming an image on a substrate, which comprises coating the substrate with a solution, in an organic solvent, of an amine compound of molybdenum, tungsten or vanadium that changes colour on heating or irradiation, and heating or irradiating the coating.

2 (Currently amended). A ~~[[process]]~~ method for forming an image on a substrate, which comprises coating the substrate with an aqueous dispersion or suspension, of an amine compound of molybdenum, tungsten or vanadium that changes colour on heating or irradiation, and heating or irradiating the coating.

3 (Currently amended). ~~A process~~ The method according to claim 1 ~~or claim 2~~, wherein the amine compound is of molybdenum (VI).

4 (Currently amended). ~~A process~~ The method according to claim 3, wherein the amine is a secondary or tertiary alkylamine in which each alkyl group has up to 12 carbon atoms and the amine has up to 24 carbon atoms.

5 (Currently amended). ~~A process~~ The method according to ~~any preceding~~ claim 1, wherein the coating also comprises the use of an organic polymer binder.

6 (Currently amended). ~~A process~~ The method according to ~~any preceding~~ claim 1, wherein the coating also comprises the use of a colour-former, ~~e.g. a substantially colourless electron donating dye precursor.~~

7 (Currently amended). ~~A process~~ The method according to ~~any preceding~~ claim 1, wherein the substrate is substantially transparent to visible light.

8 (Currently amended). ~~A process~~ The method according to ~~any preceding~~ claim 1, wherein the coating is irradiated using a laser.

9 (Currently amended). ~~A process~~ The method according to claim 8, wherein the laser light has a wavelength of 800-1500 nm.

10 (Currently amended). ~~A process~~ The method according to claim 8 ~~or claim 9~~, wherein the coating additionally comprises an IR absorber that absorbs laser radiation.

11 (Currently amended). A coated substrate, wherein the coating is a substantially visible light-transparent layer comprising an amine compound of molybdenum, tungsten or vanadium that changes colour on heating or irradiation ~~as defined in any of claims 1 to 4~~.

12 (Currently amended). ~~[[A]]~~ The coated substrate according to claim 11, wherein the coating also comprises an organic polymer binder ~~also an additional component as defined in claim 5 or claim 6~~.

13 (Currently amended). ~~[[A]]~~ The coated substrate according to claim 11 ~~or claim 12~~, wherein the substrate is also substantially transparent to visible light.

14 (Currently amended). ~~[[A]]~~ The coated substrate according to ~~any of claim~~ ~~[[s]]~~ 11 ~~to 13~~, including also an image formed therein by heating or irradiation.

15 (Currently amended). ~~[[A]]~~ The coated substrate according to ~~any of claim~~ ~~[[s]]~~ 11 ~~to 14~~, wherein the coating additionally comprises an IR absorber that absorbs laser radiation.

16 (Currently amended). A solution of an amine compound of molybdenum, tungsten or vanadium that changes colour on heating or irradiation ~~as defined in any of claims 1 to 4~~ and one of the following: ~~[[of]]~~
a thermoplastic polymer;
or a photopolymerisable monomer.

17 (Canceled).

18 (Currently amended). ~~[[A]]~~ The solution according to claim 17, which is fluid at or below 150° C.

19 (New). The method according to claim 2, wherein the amine compound is of molybdenum (VI).

20 (New). The method according to claim 19, wherein the amine is a secondary or tertiary alkylamine in which each alkyl group has up to 12 carbon atoms and the amine has up to 24 carbon atoms.

21 (New). The method according to claim 2, wherein the coating also comprises the use of an organic polymer binder.

22 (New). The method according to claim 2, wherein the coating also comprises the use of a colour-former, e.g. a substantially colourless electron-donating dye precursor.

23 (New). The method according to claim 2, wherein the substrate is substantially transparent to visible light.

24 (New). The method according to claim 2, wherein the coating is irradiated using a laser.

25 (New). The method according to claim 24, wherein the laser light has a wavelength of 800-1500 nm.

26 (New). The method according to claim 24, wherein the coating additionally comprises an IR absorber that absorbs laser radiation.

27 (New). The coated substrate according to claim 11, wherein the coating also comprises the use of a colour-former.

28 (New). The solution according to claim 16, wherein the amine compound is of molybdenum (VI).

29 (New). The solution according to claim 16, wherein the amine is a secondary or tertiary alkylamine in which each alkyl group has up to 12 carbon atoms and the amine has up to 24 carbon atoms.